

ABSTRACT OF THE DISCLOSURE

An image sensor unit (1) has an electric discharge light emitting lamp (2) for producing an illumination beam. The lamp comprises a first electrode (22) and a second electrode (23) facing each other and defining a discharge space (2D) between them along the longitudinal axis of the lamp. A first light emitting layer (20) and a second light emitting layer (20') are provided in the discharge space so as to face each other and to cover the first and second electrodes, respectively. A dielectric material (21, 2B) is inserted between the first electrode and the first light emitting layer, and between the second electrode and the second light emitting layer. At least one of the first and second light emitting layers is arranged so as to define an uncovered region (D, D'), in which at least one of the dielectric material, the first electrode, and the second electrode is exposed to the discharge space.